

### **REMARKS**

Applicants gratefully thank the Examiner for granting an interview on August 17, 2006. This Amendment follows up on that interview, and is believed to place this application clearly in condition for allowance.

Applicants also gratefully acknowledge that claims 13, 14, 17 and 18 were found to contain patentable subject matter.

The foregoing amendments in claims 4, 21, 22, and 27 change "hand" to "device" to provide proper antecedent basis and overcome the rejection of claims 4, 21-23, and 27 under 35 USC 112, second paragraph. In claim 25, line 1, "self, contained" is also changed to "self-contained" to correct a minor typographical error and be consistent with the antecedent bases for this phrase.

Claims 32-38 are cancelled as directed to a non-elected invention.

Applicants respectfully traverse the rejection of claims 1-10 and 15, 16, 19, 20, 30 and 31, under 35 USC 102(b) as anticipated by U.S. Patent No. 2,567,066 to Goldman, as well as the rejection of claims 11-12 and 25-27 under 35 USC 103(a) as unpatentable over Goldman '066 in view of Priolo et al. U.S. Patent No. 5,346,351, and the rejection of claims 21-24, 28 and 29 under 35 USC 103(a) as unpatentable over Goldman '066 in view of Maydan U.S. Patent No. 5,280,983.

As noted in Applicants' last response and at the interview, Goldman '066 is a 1948 patent describing an artificial human limb, e.g. a hand or a portion of a leg and a foot. The Goldman hand, e.g. as shown in Fig. 3, has finger portions each pivoted by a small solenoid 22 mounted within the artificial hand located near an associated joint and acting through a lever arm 19. Wires 25 supply power to the solenoids from a battery 27. The fingers can grip under the control of a spring-loaded switch 30 (Fig. 4) "carried in the mouth of the wearer ... so that a difference in biting pressure may be used to control the different outer and inner joints of the hand ..." (Col. 1, lines 17-22). Further, "the control unit consists of ... contacts 32 and 33" (Col. 3, lines 7-10) closed by

member 34 which is "manually" (orally) operated by opening and closing the jaw (Goldman claim 6).

As also discussed at the interview, if the Examiner equates the Goldman mouth-held switch 30 with Applicants' claimed network controller, and the Goldman solenoid 22 with Applicants' claimed actuator controllers each disposed "proximate" an associated rotary joint, then the Goldman lever 19 must be equated with Applicants' actuator. This is the analysis appearing on page 3, paragraph 5, of the pending Action.

Applicants' actuator, however, is not a rigid, passive element such as the Goldman lever 19. It is described in the specification as a "motor," (p. 16, l. 10), "brushless motor," (p. 8, l. 26), "located at each joint to produce a rotational movement of a link," (p. 8, ll. 26-27), "driving" a finger joint (p. 16, ll. 7-8), and powered through an associated controller (p. 9, ll. 11-12). Clearly, it is an active drive element, a source of motive force, not a passive, driven lever, or the like.

Claim 1 is amended to make this distinction over the Goldman lever 19 more clear cut.

The Priolo, and Maydan references do not overcome these deficiencies of the Goldman reference, or, in any combination, render the cited claims obvious.

Priolo is cited only as teaching a worm gear drive, and Maydan is cited only for the use of optical sensors on a gripper. These features, as well as the other teachings of these references, do not supply the deficiencies of the Goldman reference.

Moreover, with respect to claims 25-27, there is no disclosure that the mounting of the Priolo worm gear supports the rotor shaft, or that the motor used in Priolo is in any way non-conventional, e.g. does not have internal motor bearings. Claims 25-27 specify that the motor shaft is supported in a housing external to the motor. As described at page 15, lines 23-32 of the specification, the claimed external-to-the-motor support of the motor shaft is important in reducing friction, providing an enhanced performance, and providing a "drop-in" assembly. In response to the Examiner's

argument at the interview that claim 25 as filed does not exclude the possibility of conventional motor bearings as well as the external bearings and support for the rotor, claim 25 is amended to make this explicit. These claimed features of claims 25-27 are not taught or suggested by Goldman, Priolo, or the other art of record, alone or in combination.

Applicants also gratefully note that the further prior art cited in the Supplemental Information Disclosure Statement filed on April 7, 2006 was considered on May 25, 2006.

For these and other reasons of record, Applicants urge that the pending claims define patentably over Goldman and the other art of record, and that this application is in condition for allowance. If the Examiner has any further comments or questions, he is invited to telephone the undersigned attorney.

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Respectfully submitted,

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